



# GUJARAT TECHNOLOGICAL UNIVERSITY

## Bachelor of Design Syllabus

Subject Code: 1120004

Subject Name: Digital Thinking and Representation

WEF Academic Year :	2023-24
Semester :	II
Category of the Course :	Elective-1

<b>Prerequisite :</b>	
<b>Rationale :</b>	Computer application in Design is vital to perform in real life. The course is aimed at developing competencies in various graphic software related to content creation, visualization of content, communication and presentation & DESIGN related to graphic software as an integral part of skills and tools of designer's arsenal in practice

### Course Scheme :

Teaching Scheme			Total Credits	Assessment Pattern and Marks				Total Marks
L	T	PR		C	Theory		Practical	
			ESE (E)		PA (M)	ESE (V)	PA (I)	
1	0	2	2	0	30	50	20	100

### Course Content:

Sr. No.	Course Content	No. of Hours	% of Weightage
1	<b>UNIT I: Introduction to Graphic Software</b> - Basics of Photoshop and its application in editing of pictures and visuals. Different types of file formats and their use. Special effects and navigating different features of software. Development of raster images and digital images manipulation using Adobe Photoshop.	15	25
2	<b>UNIT II: Introduction to Adobe Illustrator</b> - Features and use of Adobe Illustrator and their application in presentations visualization of graphic images. Development of simple graphic images with Adobe Illustrator and exploring various features for illustration, drawings, materials representation etc.	15	25
3	<b>UNIT III: Introduction to Sketch Up</b> - Basics of Sketch Up as a 3D visualization software. Making simple solids, assigning dimensions, extrusion, contouring, assigning materials and surface features and importing visual elements and objects for visualization. Exploring all features of software as a tool for 3D visualization and representation of objects, spaces and products.	15	25



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4	<b>UNIT IV: Project applications</b> - Assignments to demonstrate application and creative visualization of graphic images. Assignments to demonstrate visualization/representation of 3D objects/spaces/ products in Sketch UP.	15	25
<b>Total</b>		<b>60</b>	<b>100</b>

### Reference Book:

1. Adobe Photoshop CC Classroom in a Book 1st Edition, Kindle Edition
2. by [Faulkner Andrew](#)(Author), [Chavez Conrad](#)(Author)
3. Adobe Photoshop: A Complete Course and Compendium of Features Paperback – Illustrated, 5 May 2020by [Stephen Laskevitch](#)(Author)
4. [Grant, Hector, ADOBE ILLUSTRATOR FOR BEGINNERS 2021: LEARN GRAPHIC DESIGN WITH ILLUSTRATOR](#)
5. Karlins, David, Adobe Illustrator CC For Dummies 1st Edition, 2020
6. Hanson, Allen, Learning Sketchup: A 3d Modeling Guide for Beginners 2017

### Course Outcome:

After Completion of the Course, Student will able to:

No	Course Outcomes
1	Develop competency in use of graphic software in different visualization projects
2	Enable students to make presentations of design concepts with clarity, details and visual feel.
3	Enable effective visualization of 3D forms through application of 3D software.
4	Explore various possibilities of different graphic and 3D software and their potential application in work.
5	Develop judgements on use of appropriate software depending on the requirements.
	Create basic digital competencies in visualization, representation and design specifications for various design projects.

### Suggested Course Practical List:

### List of Laboratory/Learning Resources Required:

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